



DIETARY SUPPLEMENT FACT SHEET

<http://chppm-www.apgea.army.mil/dhbw/Wellness.aspx>

Glucosamine (*Glucosamine Sulfate, Glucosamine Hydrochloride*)

Also known as: Glucosamine, Chitosamine

Historical Perspective: Glucosamine is made by the body and found in the fluid around the joints. It can also be taken from natural sources like seashells.

Common Uses: Glucosamine has gained popularity as an alternative to non-steroidal anti-inflammatory drugs for arthritis relief and knee pain.

Common and/or Recommended Dosage: The recommended dosage is 1500 milligrams per day or 500 milligrams three times per day.

Potential Side Effects: Glucosamine may cause an upset stomach, gas or bloating, heartburn, diarrhea or constipation.

Food-Drug-Supplement Interactions: Glucosamine may decrease the effectiveness of medications used to treat diabetes such as glyburide (DiaBeta, Glynase, Micronase), glipizide (Glucotrol), glimepiride (Amaryl), acarbose (Precose), nateglinide (Starlix), metformin (Glucophage), pioglitazone (Actos), rosiglitazone (Avandia), and insulin. Glucosamine Hydrochloride might decrease the effectiveness of some medicines used to treat cancer such as etoposide (VP16, VePesid) and doxorubicin (Adriamycin).

Contraindication to Use: Diabetes, shellfish allergy, pregnancy and breast-feeding.

Research Data on Safety and Efficacy: Researchers suggest that extra glucosamine might help to supply the materials needed to rebuild the cushion that becomes thinner and stiff in osteoarthritis (noninflammatory degenerative joint disease). Glucosamine appears to work as well as some pain medications. However, it takes about four weeks of taking the supplement before the pain is decreased or any potential benefits can be realized. Glucosamine may not be as effective for reducing pain in more severe osteoarthritis. There is some concern that glucosamine might also elevate blood lipid levels and blood pressure. Individuals with high cholesterol or high blood pressure should discuss using glucosamine with their health care providers prior to taking the supplement. Although glucosamine is frequently marketed with chondroitin, there is no evidence that the combination has greater benefit than just taking the glucosamine.

Bottom Line: Glucosamine seems to be safe for most adults.

References:

1. The Health Professional's Guide to Popular Dietary Supplements, 2nd Edition. Allison Sarubin Fragakis, MS, RD, The American Dietetic Association, 2003.
2. The Natural Medicines Comprehensive Database. 4th Edition. Jeff M. Jellin, Pharm D. Therapeutic Research Facility, 2002.